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Application Serial No.: 10/517,324

Amendment in Response to Restriction Requirement

**AMENDMENTS TO THE CLAIMS:** 

Please cancel claims 9, 11 and 21 without prejudice or disclaimer, and amend claims 2, 19

and 20, as follows. This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

Claim 1 (Previously presented): A DNA-library for production of a library of double

stranded RNA-molecules (dsRNA) of a predefined length, the library consisting of double stranded

DNA-molecules (dsDNA) where each dsDNA comprise a stretch wherein both strands contiguously

encode a promoter, a dsRNA-encoding sequence of 10-30 base pairs encoding the dsRNA to be

produced and a transcription termination sequence, wherein each of said promoters has been mutated

to include the sequence complementary to the termination sequence of the other strand.

Claim 2 (Currently amended): A DNA-library according to claim 1, wherein said promoters

are III-promoters or U6-promoters promoter is H1 promoter that have has been mutated so as to

incorporate an AAAAA-stretch at the end of the promoter, immediately next to the transcription

starting site.

Claim 3 (Previously presented): A DNA-library according to claim 1, wherein said dsRAN-

encoding sequence is randomized in between 4 and all positions.

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Claim 4 (Previously presented): A DNA-library according to claim 1, wherein the produced dsRNA contains a single stranded region at one end.

Claim 5 (Previously presented): A DNA-library according to claim 1, wherein the produced dsRNA contains single stranded regions at both ends.

Claim 6 (Previously presented): A DNA-library according to claim 4, wherein at least one of the single stranded regions of the dsRNA is a poly-U overhang.

Claim 7 (Previously presented): A DNA-library according to claim 4, wherein at least one of the single stranded regions of the dsRNA is a UU overhang.

Claim 8 (Previously presented): A DNA-library according to claim 1, wherein it is constructed in a plasmid vector.

Claim 9 (Canceled).

Claim 10 (Previously presented): A DNA-library according to claim 1, wherein the randomness of the library was modified by selection of the random DNA oligonucleotides, before cloning the said random DNA oligonucleotides into the vectors, through hybridzation to a total RNA 05/26/2010 09:41 2023317519 KRATZ QUINTOS HANSON PAGE 06/10

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preparation or total mRNA preparation from a source, whereby only the oligonucleotides hybridized to the source RNA (or mRNA) are subsequently cloned into the vector, and wherein the source can be a cell, a cell line, a tissue, or a organism.

Claim 11 (Canceled).

Claim 12 (Previously presented): An RNA-library obtained from the DNA-library according to claim 1.

Claim 13 (Previously presented): A method of using the DNA-libraries of claim 1, wherein the library is transiently or permanently introduced into cells as a mixture.

Claim 14 (Previously presented): A method of screening for double stranded RNA with biological functions comprising the use of the DNA-library according to claim 1.

Claim 15 (Previously presented): A method of screening for novel genes comprising the use of the DNA-library according to claim 1.

Claim 16 (Previously presented): An individual DNA-member of the DNA-library according to claim 1.

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Claim 17 (Previously presented): An individual RNA-member of the RNA-library according

to claim 12.

Claim 18 (Previously presented): Use of a DNA-molecule comprising the DNA-sequence

AAAAA(N), TTTTTT, wherein (N), is a randomized region of 19, 20 or 21 nucleotides, in the

production of dsRNA-molecules.

Claim 19 (Currently amended): An H1 RNA-polymerase III-promoter mutated to have

[[and]] an AAAAA-stretch at the end of the promoter immediately ahead of the transcription starting

site.

Claim 20 (Currently amended): A plasmid with two mutated HI RNA polymerase III

promoters, each embedding one transcription termination sequence for the other promoter, and a

siRNA-encoding region between the promoters.

Claim 21 (Canceled).

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